



National MDA Architecture Plan

A National Maritime Information Sharing Environment (MISE) implemented through common data standards and architectural understanding.

The National MDA Architecture Plan brief

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OVERVIEW

- [INTRODUCTION](#)
 - Structure of Brief and Presentation
- [BACKGROUND](#)
 - Direction, Objectives and Authorities
- [NATIONAL MDA ARCHITECTURE](#)
 - Overview of the Architecture Plan
- [NIEM PROGRAM](#)
 - Review of the NIEM Program
- [NIEM MARITIME](#)
 - NIEM Maritime Development
- [DATA MODELS](#)
 - Sharing Process and Exchange Models
- [SECURITY & DATA MANAGEMENT](#)
 - Attributes and Metadata
- [PARTICIPATION](#)
 - Joining the MDA Architecture: A Trusted System
 - Implementation Guide: mise.mda.gov
- [IMPLEMENTATION](#)
 - Domestic Common Maritime Picture (DCMP)



National MDA Architecture

A National Maritime Information Sharing Environment (MISE) implemented through common data standards and architectural understanding.

Introduction



INTRODUCTION

- **STANDARD SLIDE DECK FOR BRIEFING**
 - Leave behind for intra-departmental briefs
- **SECTIONS FOR EACH PART OF THE BRIEF**
 - Each section is developed as a standalone brief
- **DOCUMENTS AVAILABLE ONLINE**
 - <https://mise.mda.gov>
 - Includes
 - Implementation Guide
 - Specification Documents
 - NIEM Maritime Information Exchange Package Documentation (IEPDs)
 - Implementation tools kits for Java and .Net environments



National MDA Architecture

A National Maritime Information Sharing Environment (MISE) implemented through common data standards and architectural understanding.

Background

“It is a national priority to efficiently, effectively, and appropriately share and safeguard information so any authorized individual (Federal, state, local, tribal, territorial, private sector or foreign partner) can prevent harm to the American people and protect national security. The Strategy points toward a future in which information supports national security decision making by providing the right information, at any time, to authorized users, restricted only by law or policy, not technology: and where safeguarding measures, to include a comprehensive regimen of accountability, prevent the misuse of the information.”

Vision Statement, National Strategy for Information Sharing and Safeguarding, December 2012



AGENDA

- NATIONAL LEVEL GUIDANCE
- THE TASK
- GUIDING CONCEPT
- UNDERSTANDING SHARING
- COMMON SHARING PROBLEMS



NATIONAL LEVEL GUIDANCE

- **NATIONAL MDA CONOPS**
 - Describes a Services-Oriented Architecture (SOA) with User Defined Operational Picture (UDOP)
 - Core services should include discovery, collaboration, mediation, messaging, security, storage, and enterprise management (performance monitoring and configuration management)
 - Develop initial services-based architecture focusing on *national* information products and utilizing existing SOA-based services
- **INTERAGENCY APPROVAL & AUTHORITY**
 - National MDA Executive Steering Committee (ESC)
 - Executive Agents from DoD, DHS, DoT & DNI (IC Community)
 - FO/SES Level Participation



THE TASK

- NATIONAL CONOPS DEFINES A NATIONAL MDA ARCHITECTURE
 - Develop an As-Is
 - Develop a To-Be
 - Develop an Implementation Plan
- APPROVAL FROM THE ESC
 - Develop AND demonstrate an architectural framework
 - Deliver functional capabilities, not just a report



OBJECTIVE

- DEVELOP INITIAL SERVICES-BASED ARCHITECTURE FOCUSING ON *NATIONAL* INFORMATION PRODUCTS AND UTILIZING EXISTING SOA-BASED SERVICES
 - Implement specific, practical examples of services at national level
 - Use these examples to describe national infrastructure processes and standards to accomplish federation of these services
 - Initial scope: 5 specific products/processes
 - Initial effort will focus more on sharing process, product is secondary



UNDERSTANDING SHARING

- **POLICIES OR DIRECTIVES**
 - Tell us we need to share, but not what or how
- ***INDIVIDUAL* UNDERSTANDING**
 - Accomplished via data sharing
 - Includes sensor or unprocessed data
- ***COMMON* UNDERSTANDING**
 - Accomplished via information sharing
 - Include processed data or analytical products
- **EACH REQUIRES COMMON REFERENCES**
 - Common data definitions, security controls and processes are required for each



COMMON SHARING PROBLEMS

- COMMON QUESTIONS

- Can I? – Do I have the technology to share?
- May I? – Do I have supporting policies or guidance?
- Should I? – Is it in the best interest of my Agency?
 - An often overlooked or misunderstood part is “what” do we want to share. More (everything) is not always better.

- ARCHITECTURAL ANSWERS

- The National MDA Architecture Plan works to:
 - Describe the technology requirements, and
 - Support policy with clear definitions of what will be shared, how it will be shared, and with whom it will be shared.
- Allow Agencies to focus on what sharing best supports their missions, not on technology or policy.



National MDA Architecture

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National MDA Architecture

Guided by the principles of the *National Strategy for Information Sharing and Safeguarding* and as directed by the National Concept of Operations for Maritime Domain Awareness (MDA CONOPS), the Department of Defense/Department of the Navy (DoD/DoN) led the effort to describe “an MDA architecture founded upon net-centric principles to provide a secure, collaborative, information-sharing environment”. The result is the Maritime Information Sharing Environment (MISE). The MISE provides an internet accessible, unclassified information sharing capability where data providers and consumers can manage and share maritime information through common data definitions.



AGENDA

- ASSUMPTIONS
- GUIDING CONCEPTS
- INITIAL FOCUS AREAS
- THE NATIONAL ARCHITECTURE
- NATIONAL ARCHITECTURE TIMELINE
- CURRENT STATE
- FUTURE STATE
- THE BIG PICTURE



ASSUMPTIONS

- NOT DIRECTIVE IN NATURE
 - All participation is voluntary
- CAN'T AFFECT INDIVIDUAL POLICIES, RESOURCES, MISSIONS OR EXISTING ARCHITECTURES
- MUST HAVE LOW THRESHOLD OF ENTRY
 - Use proven technology
 - Integrate with Agency legacy systems
- MUST LEVERAGE EXISTING NATIONAL CAPABILITIES TO THE GREATEST EXTENT POSSIBLE



GUIDING CONCEPTS

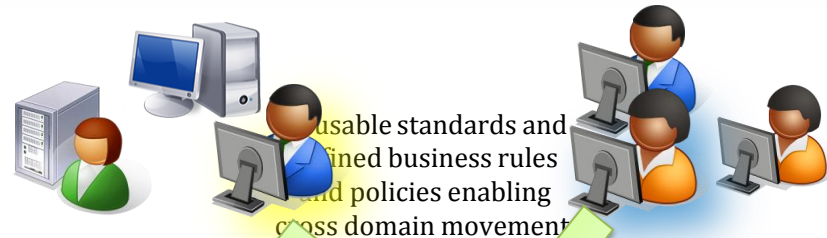
- “USERS” WILL NOT ACCESS THE MISE
 - Provide system level connectivity, not user level
- NATIONAL PRODUCTS, NOT BULK DATA
- ACCESS CONTROL DEFINITIONS ARE GLOBAL YET FLEXIBLE ENOUGH FOR EACH SYSTEM
- THINK “FREE”
 - Focus on non-material solutions
 - *Architectural processes*, not physical servers
- FOLLOW BEST PRACTICES FROM INDUSTRY
 - Don’t build new just because we can



INITIAL FOCUS AREA

- INITIAL FOCUS AREAS:
 1. Vessel position/tracks
 - Based on applicable OTH-Gold messages
 2. Arrival reports for vessels bound for U.S.
 - based on SANS data and eANOA collections
 3. Indicators& Notifications
 - Based on NORTHCOM VOI lexicon (Sep 2007)
 4. MOTR information exchanges
 - Based on standards messages used by MOTR
 5. Biometric & Identity Information Exchange
 - ANSI/NIST standard being represented in Biometric domain

THE NATIONAL ARCHITECTURE



Movement through Information Sharing Infrastructure Cross Domain Solutions

Missions:

- Collect vessel arrivals
- Assessment screening
- Boarding's & inspections

Programs & Products:

- Surface wave radar
- AIS Collection
- Data fusions product

Data Standards
-
NIEM
based
reference
model

Information Sharing Infrastructure (ISI)

Mediation
Dissemination
Entitlement Management

Data Standards
-
NIEM
based
reference
model

Users:

- Common Operational Pictures
- Portals/information displays
- Watch stander interfaces

Systems:

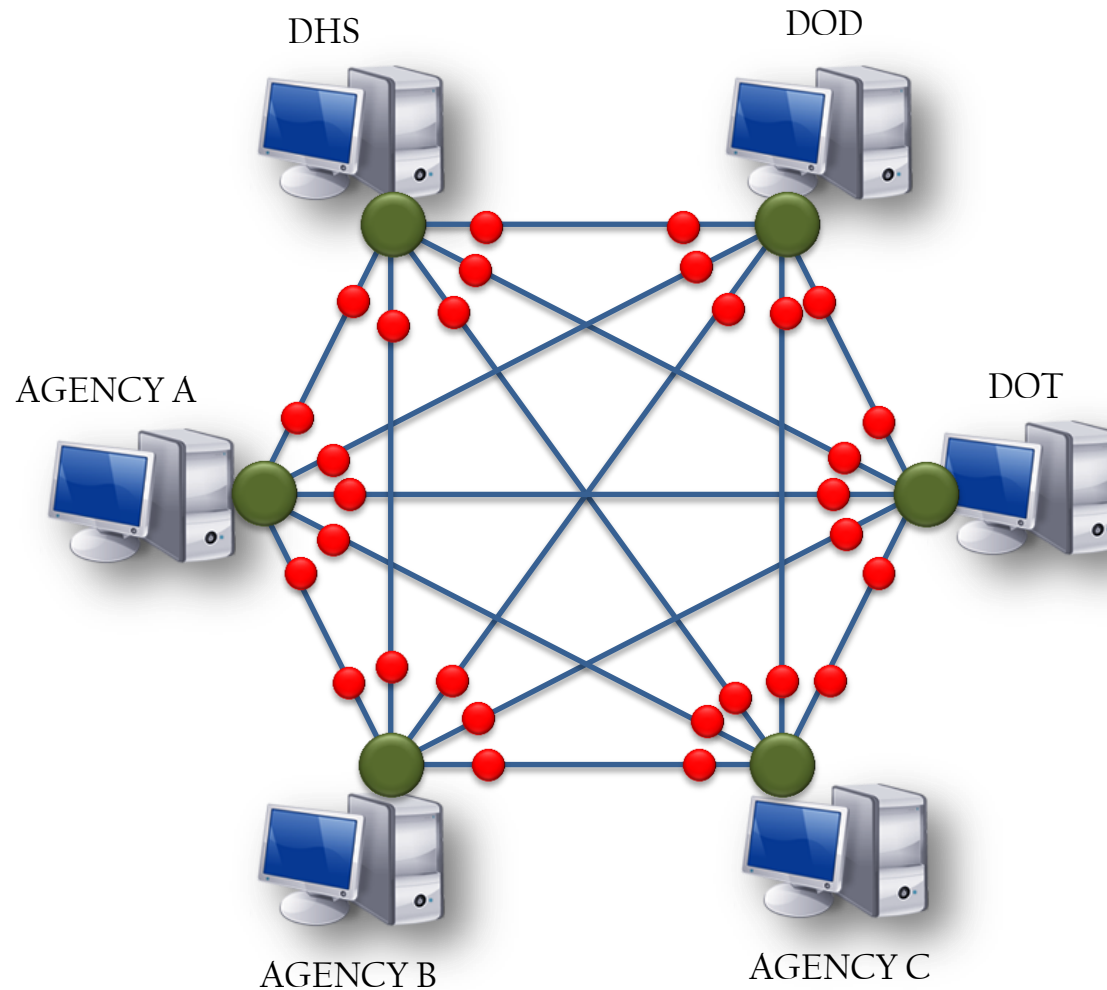
- VRMTC-A
- MAGNet
- MARAD

Attributes for Access Control

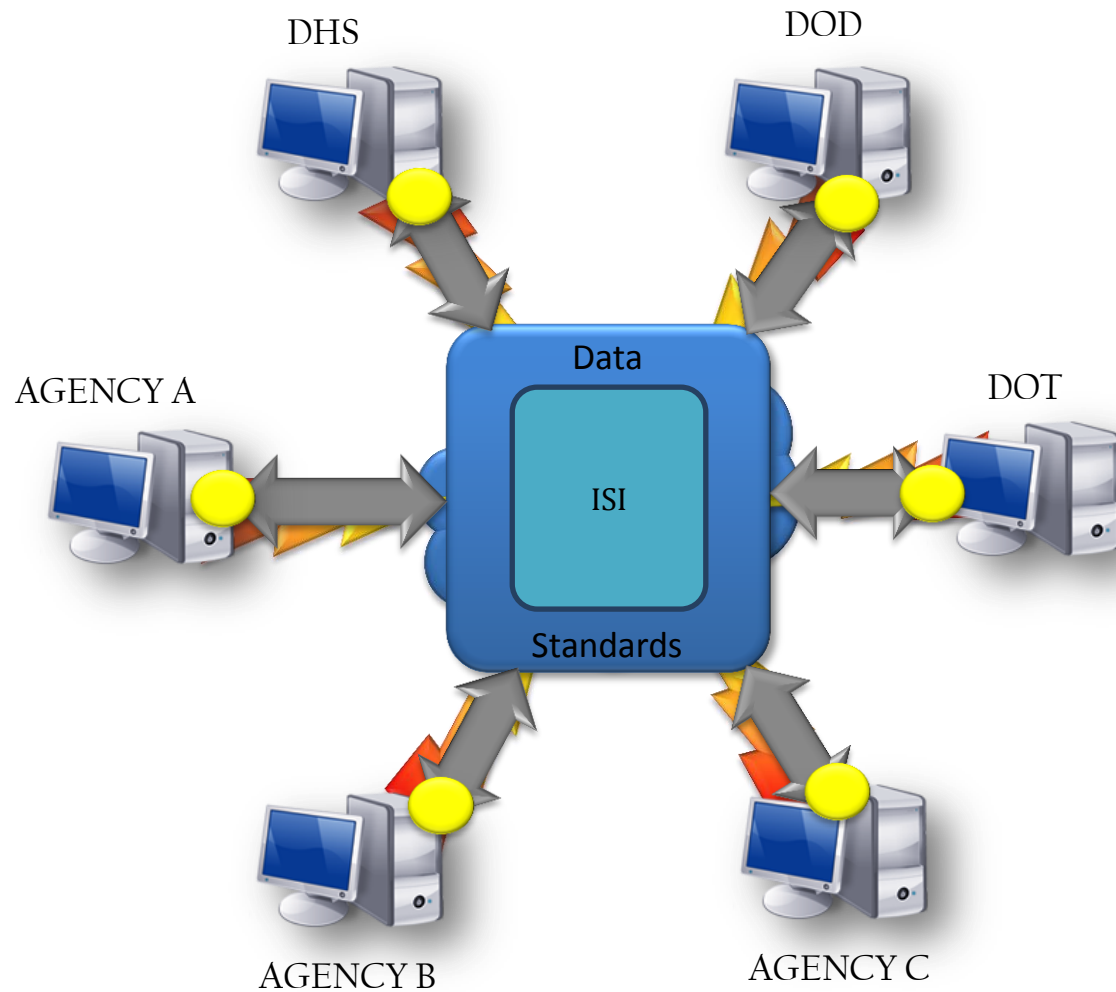
Maritime Information Sharing Environment
(MISE)

CURRENT STATE

- Point to Point Sharing



FUTURE STATE



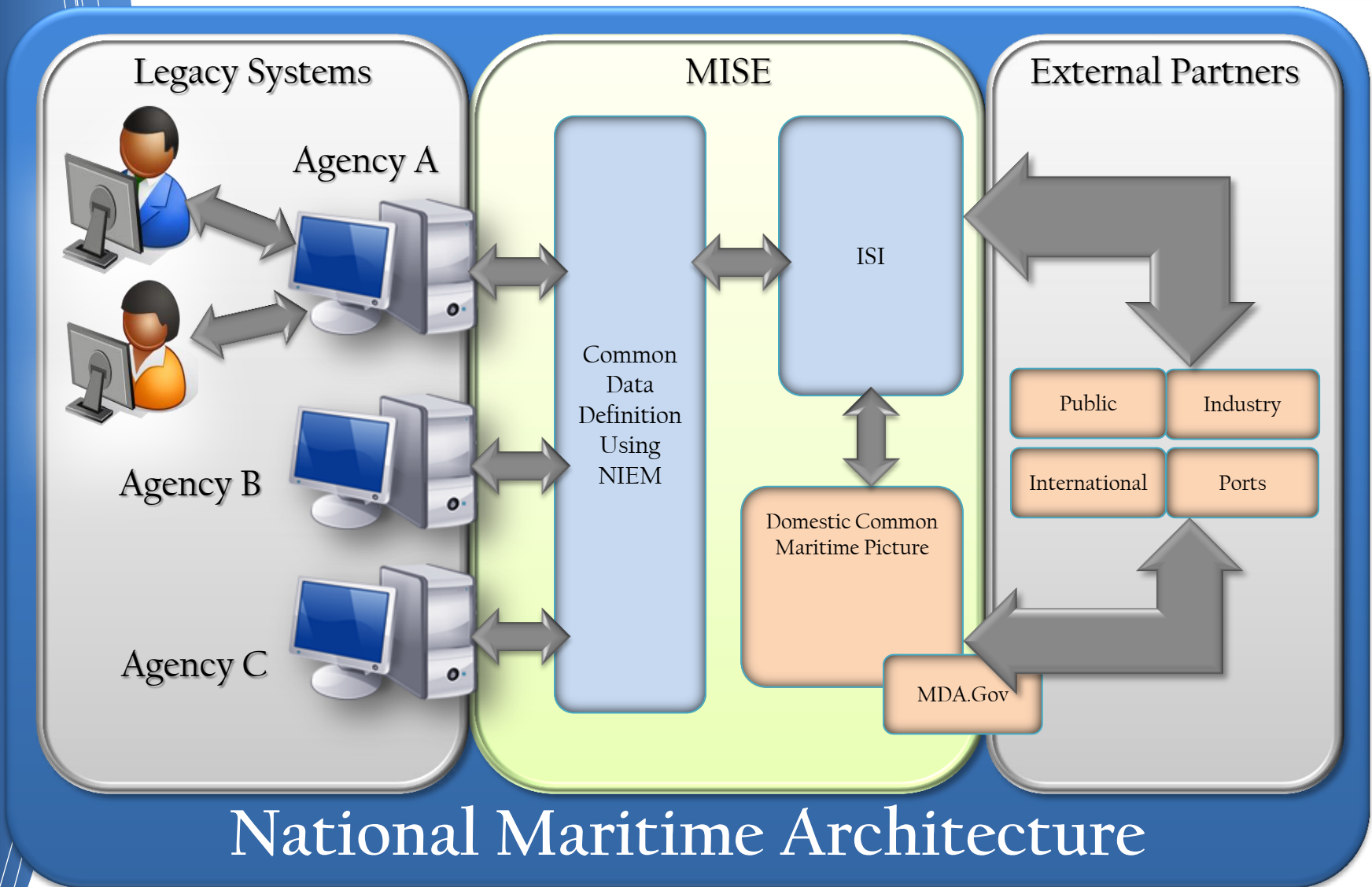
- The wonders of the Cloud



UNDERSTANDING THE PARTS

- COMMON LANGUAGE
 - NIEM –M
- COMMON SECURITY
 - Use Case
 - Attributes
 - Trust Fabric
- COMMON ENVIRONMENT
 - MISE

THE BIG PICTURE





ABOUT THE DOCUMENT

The National Maritime Domain Awareness Architecture Plan describes a process for sharing maritime information. To provide the appropriate level of detail and technical specificity to the full spectrum of readers, the document is divided into multiple sections. They include:

Executive Summary

The Executive Summary is for senior leaders who want an overview of the plan. It summarizes the major concepts and business processes without technical implementation information.

Concept

The Concept is for mid-level managers and senior technical managers who need to understand, with some detail, the objectives, features and business processes of the plan.

Framework

The Framework is for technical managers or technology implementers who need to understand, with greater detail, the technical implementation and specification of the plan.

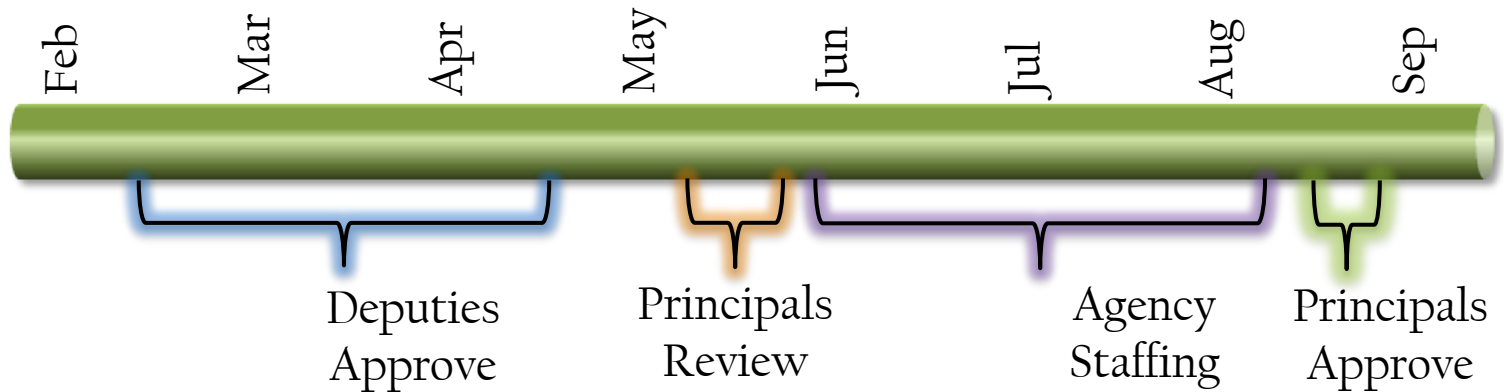
Appendices

The Appendices is a collection of architecture and technical documents which are relevant to, but not otherwise included in, the National Maritime Domain Awareness Architecture Plan. Each appendix represents the state of the technology, process or definition at the time this plan was published.

Attachments

The Attachments is a collection documents that describe or otherwise represent the National Information Exchange Model – Maritime (NIEM-M) at the time this plan was published. While NIEM-M is not part of the plan, the definition of common data standards is integral to the success and implementation of this plan.

TIMELINE



- **DEPUTIES APPROVE DRAFT PLAN**
 - 15February – 12 April – Completed on time
- **ESC PRINCIPALS REVIEW**
 - 10 May – 17 May – Delays in updating Plan – Sent on 1X May
- **AGENCY STAFFING**
 - 24 May – 02 August - Delay due to 30May ESC schedule
- **ESC APPROVAL**
 - As of 10 SEP, plan is approved by 75% of ESC



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NIEM Program

In order to comply with White House guidance on the adoption of reference information exchanges, DoD will adopt the National Information Exchange Model (NIEM) as the best suited option for standards-based data exchanges.

DoD Memorandum, Adoption of the National Information Exchange Model within the Department of Defense, March 28, 2013



AGENDA

- WHAT IS NIEM
- WHO'S PARTICIPATING IN NIEM
- COMPONENTS OF NIEM
- WHAT IS AN IEPD
- SCOPE OF IEPDs
- GETTING AN IEPD

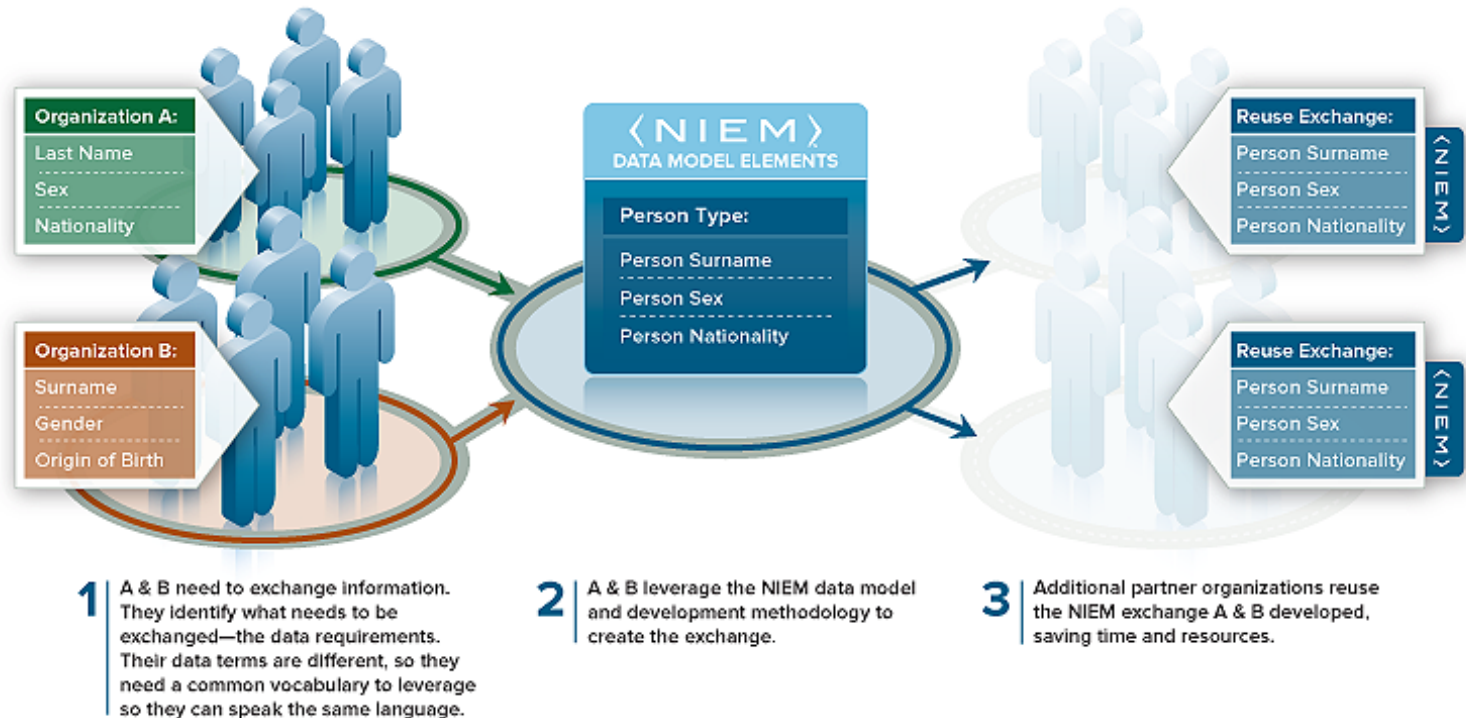
WHAT IS NIEM

NIEM is

a standard way of defining the contents of messages being exchanged.

NIEM is not

a system or database; nor does it specify how to transmit or store data.

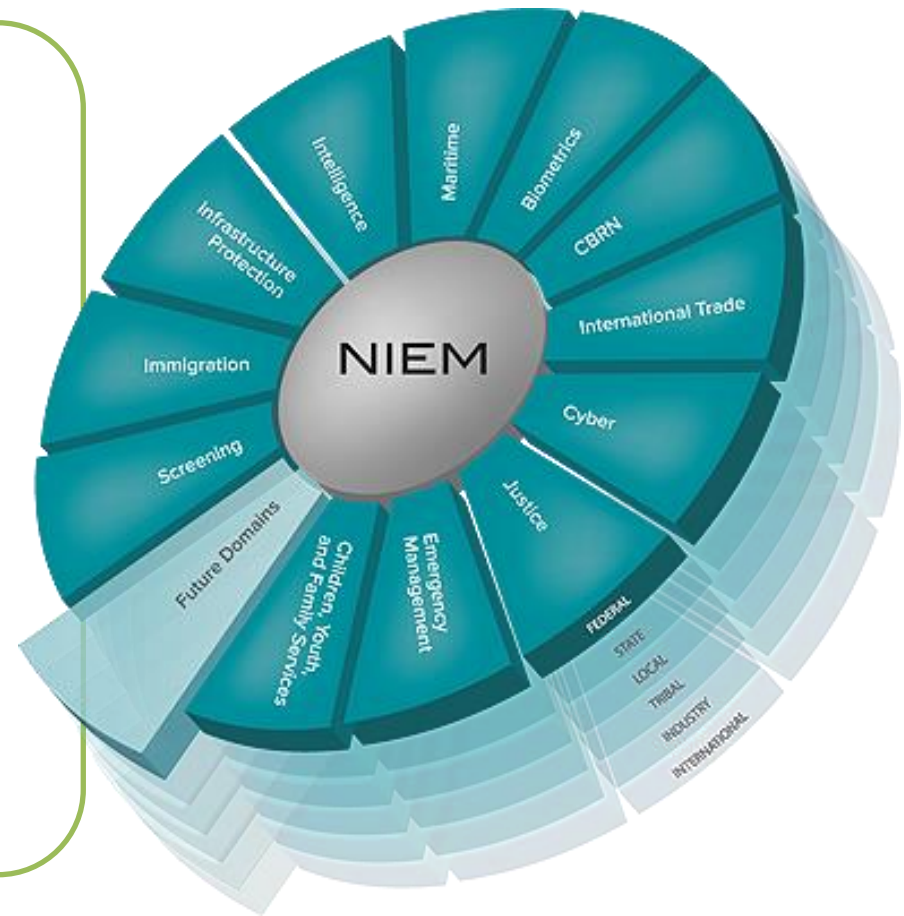


This allows diverse communities to collectively leverage a common vocabulary and exchange development tools irrespective of technologies, increasing both efficiencies and improving decision-making.

WHO'S PARTICIPATING IN NIEM

The following 16 federal agencies are committed to use NIEM:

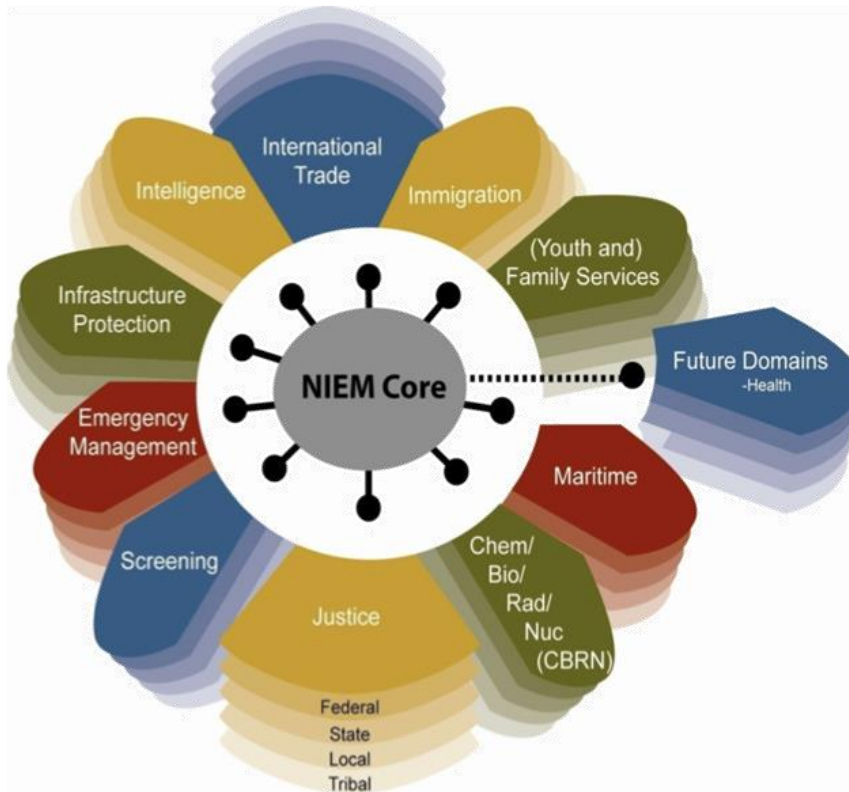
- Department of Agriculture
- Department of Defense
- Department of Energy
- Department of Health and Human Services
- Department of Homeland Security
- Department of Housing and Urban Development
- Department of Justice
- Department of Labor
- Department of State
- Department of the Interior
- Department of Treasury
- Department of Transportation
- General Services Administration
- Office of the Director of National Intelligence
- National Archives and Records Administration
- National Science Foundation



COMPONENTS OF NIEM

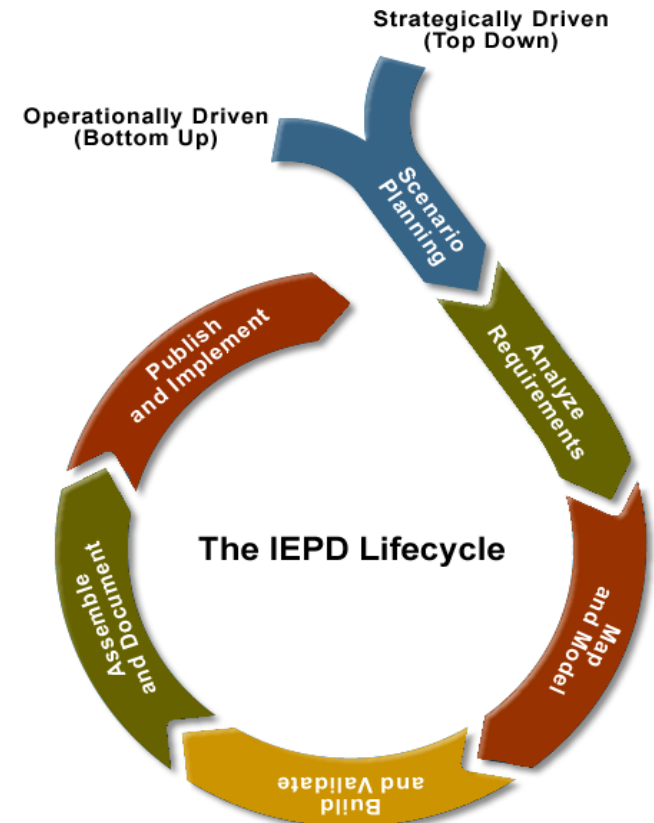
NIEM-CORE

A Common Vocabulary with terms, definitions, and formats - independent of an individual agency's database management systems



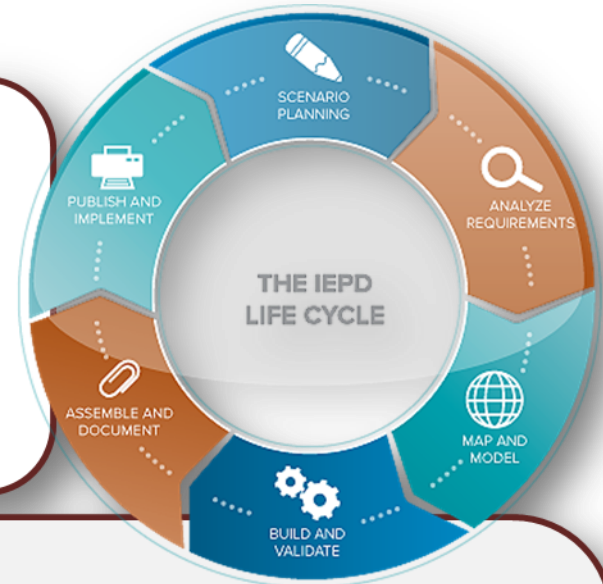
IEPD

Repeatable, reusable process for business users to document information exchange requirements



WHAT IS IN AN IEPD?

An **Information Exchange Package Documentation (IEPD)** is a collection of artifacts that describe the construction and content of an information exchange



- A. Developed to provide the business, functional, and technical details of the information exchange through predefined artifacts
- B. Created with a core set of artifacts in a prescribed format and organizational structure to allow for consistency
- C. Designed to be shared and reused in the development of new information exchanges through publication in IEPD repositories



SCOPE OF IEPDs

IEPDs contain design specifications for an information exchange but may not include supplementary information such as implementation decisions.

IEPDs do

- Include the XML schemas that define the XML message structure
- Contain standardized artifacts that document an information exchange
- Have a defined development methodology (IEPD Lifecycle)
- Ease the documentation process for reuse



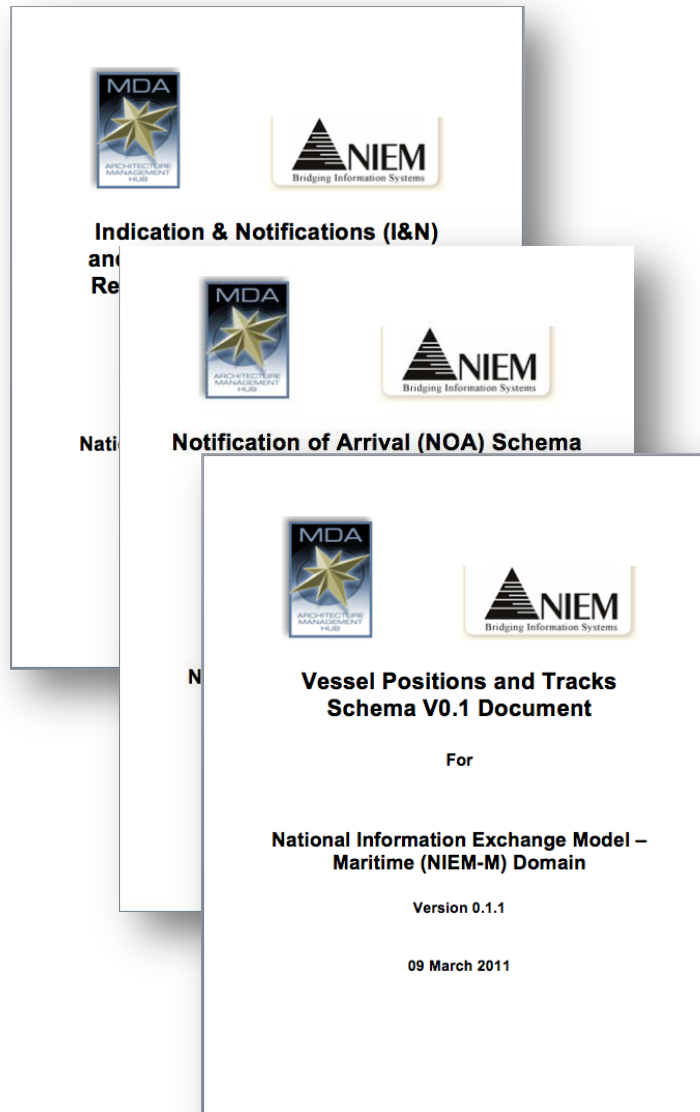
IEPDs do not

- Specify how exchange data is physically transferred between entities
- Describe an interface or Interface Control Document (ICD)
- Specify any technical information outside of the message structure





GETTING AN IEPD



- IEPD's are available at www.niem.gov and mise.mda.gov
- Downloadable
- Free
- Full use authorized



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NIEM-Maritime

On November 5, 2008, the NIEM program and the DoD Executive Agent for Maritime Domain Awareness entered into a strategic partnership designed to strengthen information exchange for Maritime Domain by leveraging NIEM.

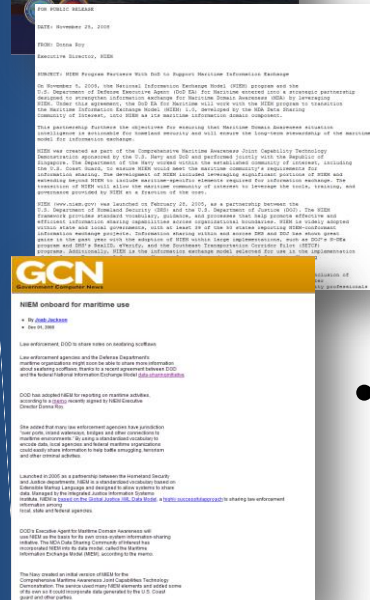


AGENDA

- NIEM AND MDA
- WHY NIEM-MARITIME
- HISTORY OF NIEM-M
- COMMON BUILDING BLOCKS
- MARITIME EIEMs
- BUILDING BLOCKS TO SHARING



NIEM AND MDA



- “The strategy for implementing MDA at the national level is to establish MIEM as the maritime domain extension to NIEM.” (MDA Architecture Management Hub Strategy)
- “On November 5, 2008, the [NIEM] program and the U.S. [DoD] Executive Agent (DoD EA) for Maritime entered into a strategic partnership designed to strengthen information exchange for Maritime Domain Awareness (MDA) by leveraging NIEM. Under this agreement, the DoD EA for Maritime will work with the NIEM program to transition the [MIEM] ... into NIEM...” (Executive Director, NIEM)
- “The transition of MIEM will allow the maritime community of interest to leverage the tools, training and governance provided by NIEM at a fraction of the cost” (Government Computer News, 1 DEC 09)
- DoD adoption of NIEM per DoD CIO Memorandum dated March 28, 2012

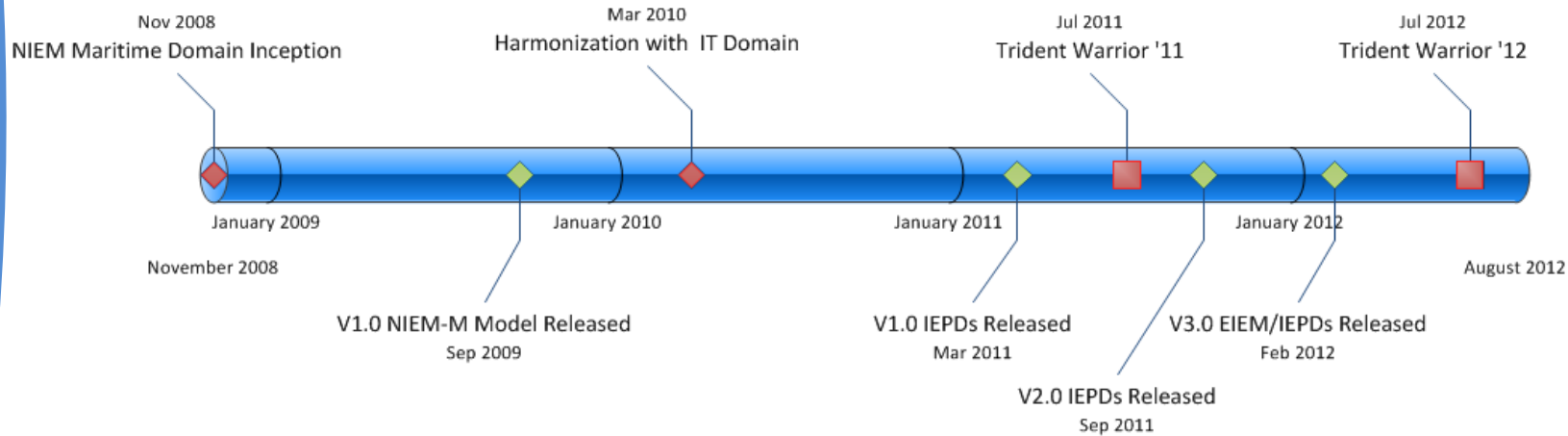


WHY NIEM-MARITIME

- NIEM-M provides a common vocabulary for consistent, repeatable exchanges of Maritime information
 - NIEM-Maritime
 - A common reference model that establishes definitions for commonly used maritime-specific data elements.
 - NIEM-Maritime Enterprise Information Exchange Model (EIEM)
 - Defines 9 core entities (called Business Information Exchange Components or BIECs) that serve as building blocks reused across maritime exchange IEPDs
 - Maritime IEPD
 - Defines common exchange models for initial focus areas



HISTORY OF NIEM-M

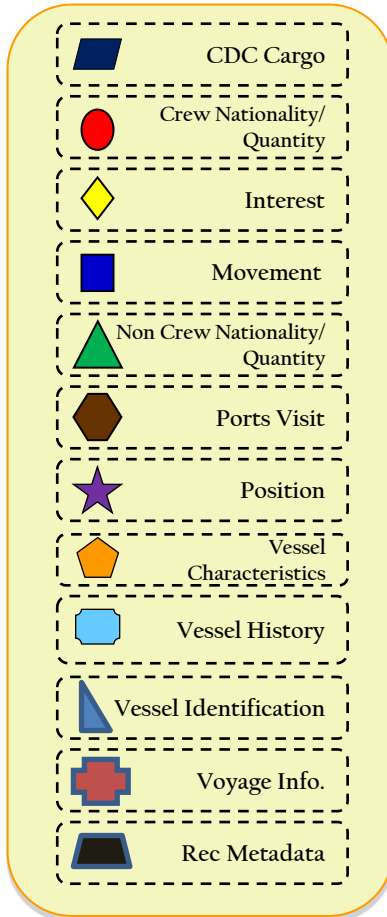


- Maritime Domain Governance includes:
 - Data Model Management
 - Help Desk Support
 - Stakeholder Engagement Processes

COMMON BUILDING BLOCKS

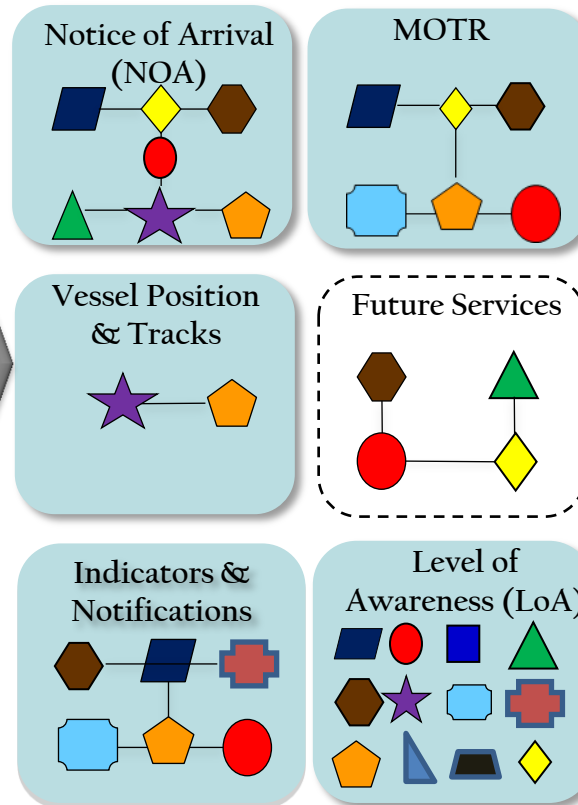
EIEM

Reusable BIEC models

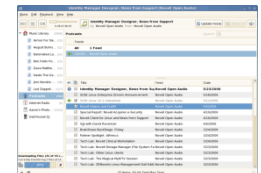


IEPDs

Each IEPD is built using a different combination of BIEC models



Google Earth
Visualization Services



Agency Specific Systems

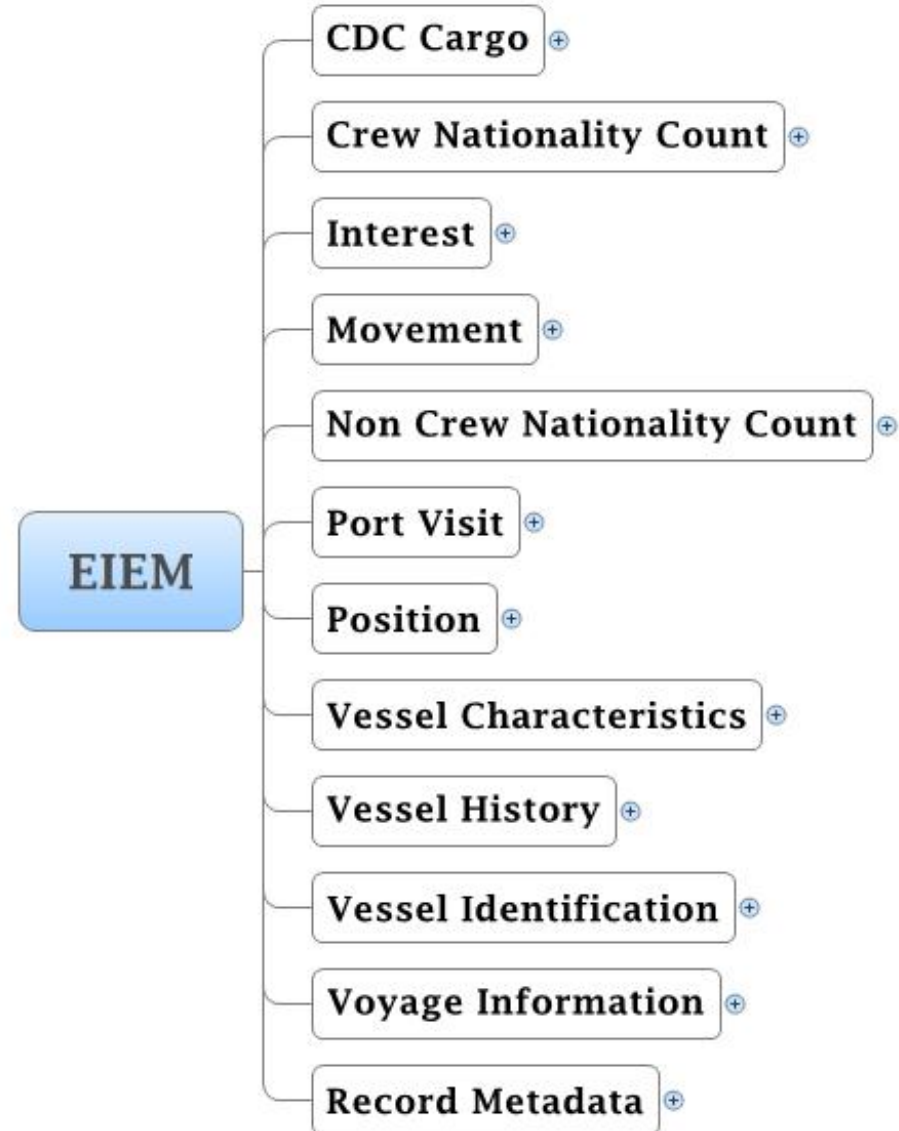
One-Time Cost
to system owners

Implementation code developed *once* for each BIEC model regardless of the number of IEPDs

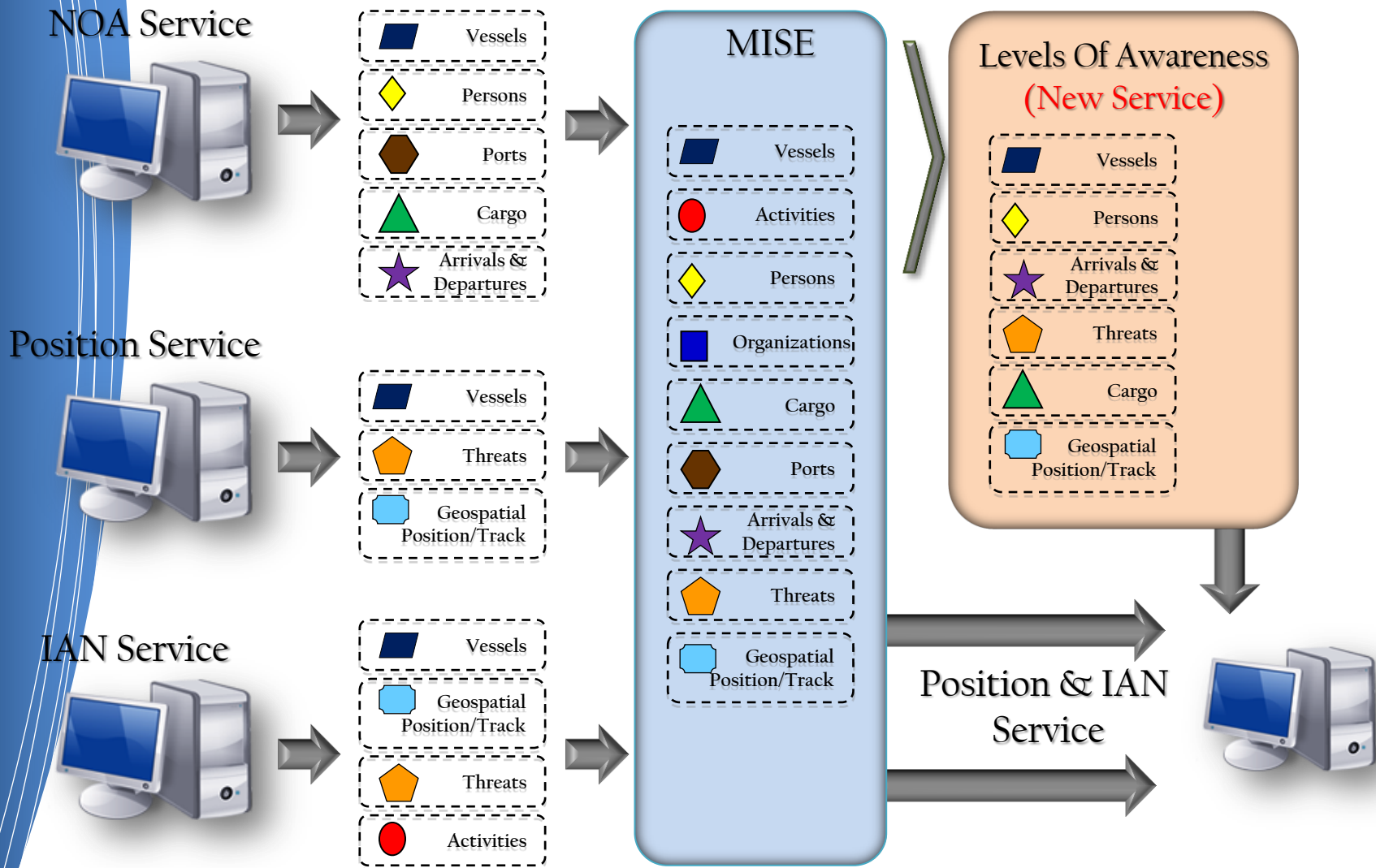


MARITIME EIEMs

- **EIEM**
 - Enterprise Information Exchange Model
- **REUSABLE CODE**
 - EIEM are used in two or more IEPDs
 - Provide reusable code components
- **EXPANDABLE**
 - EIEM can be created to match community needs



BUILDING BLOCKS TO SHARING



**Detection****Level 4**

Minimum level of information. Identifies that a vessel exists at a place and time.

- **Location** (Lat/Long)
- **Time Stamp**
- **LOA Indicator**
- **Interest Type**
- **Interest Category**
- **Interest Level**
- **Interest Event**
- **Interest Description**
- **Operational Priority**

- **Contact Information**
- **Fixing Type**
- **Reporting Type**

Classification**Level 3**

Elevated level of information. Identifies the vessel type.

- **Vessel Size** (length, breadth, & tonnage)
- **Vessel Classification** (e.g., tanker, passenger, barge, etc.)
- **Vessel Type**
- **Vessel Sub-Type**

- **Deck Configuration**
- **Destination** (AIS)
- **Navigation Status**
- **Double-Hull** (Y/N)
- **Estimated Time of Arrival** (AIS)
- **Picture** (URL)
- **Propulsion Type**

Identification**Level 2**

Critical level of information. Identifies a specific vessel.

- **Course and Speed**
- **Flag** (Nation State)
- **Vessel ID Number** (MMSI, CallSign, Hull, etc.)
- **Vessel Name**
- **Ship & Cargo Type** (AIS reported)
- **Draft** (fully loaded)
- **Speed** (Cruising and Max)

- **Ice Classification**
- **History of Violations** (5 yrs)
- **Past Incidents** (crew and passenger)
- **History of Activity**
- **Of Interest History**
- **Classification Society**

Actionable**Level 1**

Comprehensive level of information. Provides the full set of vessel EEIs.

- **Type of Cargo** (NOA)
- **CDC Declared** (Y/N- type)
- **Hazardous Materials** (name and amount)
- **Crew & NonCrew Nationality Count** (number/nation)
- **Ports of Call** (Last, Current, Next)

- **Agent**
- **Beneficial Owner**
- **Owner** (name and nation)
- **Charterer**
- **POC**
- **Previous Foreign Ports of Call** (3)
- **Armament**
- **Security Team Embarked** (Y / N / U)
- **International Ship Security Certificate** (yes, no, pending)



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Data Models

Within the Architecture Plan, “data standards” are the common vocabulary used to describe the shared data objects and the models themselves. The National Information Exchange Model (NIEM) and NIEM-Maritime serve as the reference library used to define the specific data elements to be shared.

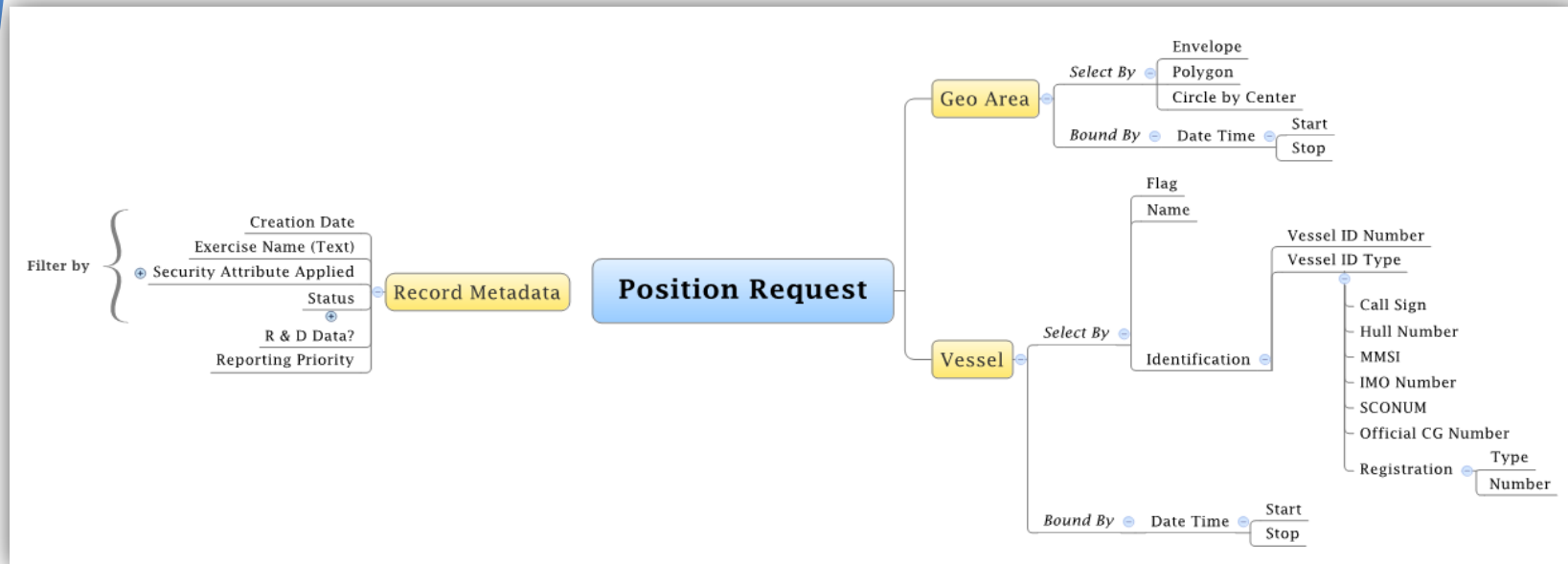


AGENDA

- MANAGING DATA : USE CASES
- USE CASE – SAMPLES
- LOGICAL EXCHANGE MODELS

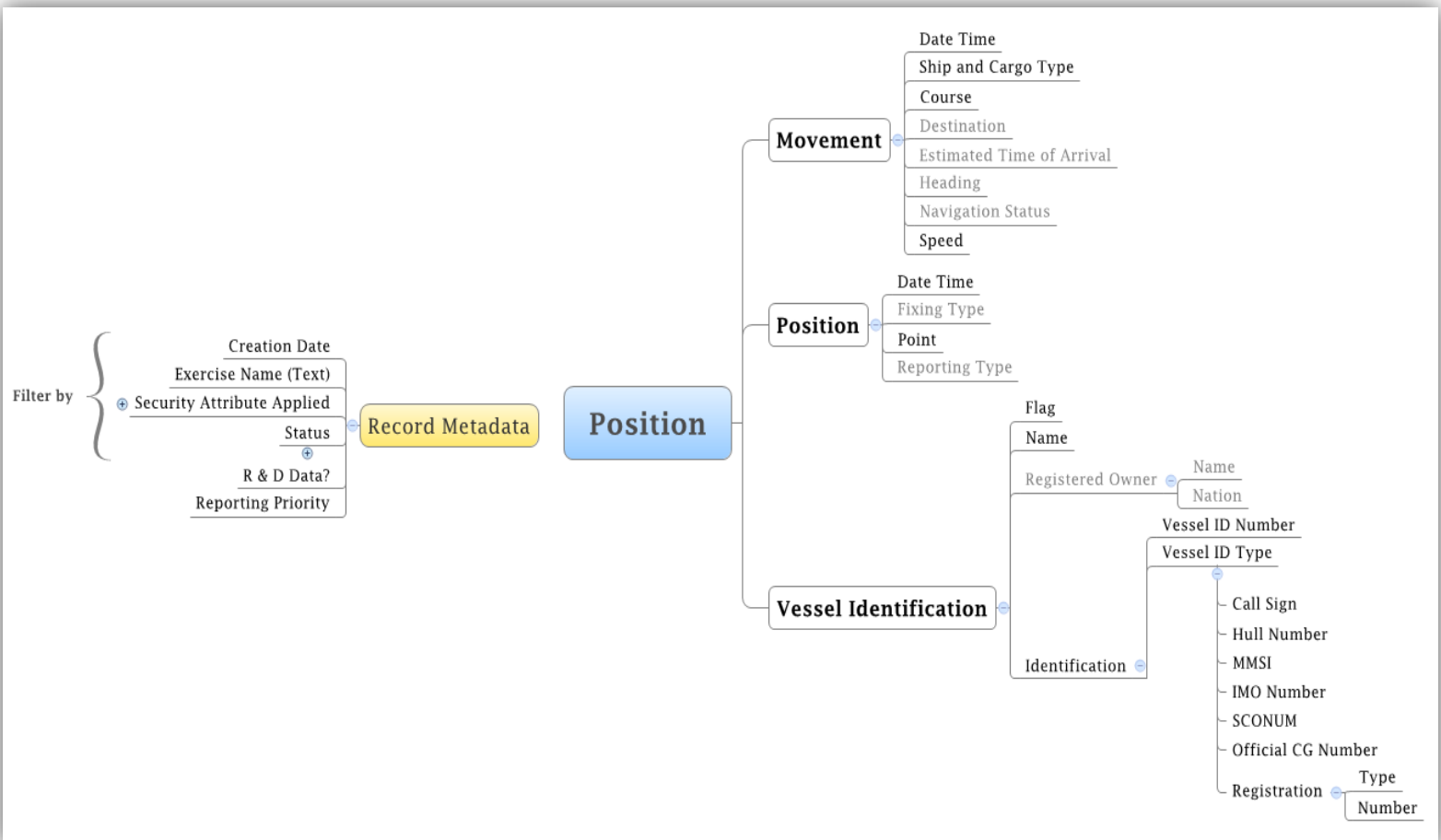
LOGICAL EXCHANGE MODELS

- GRAPHICAL REPRESENTATIONS
 - Logical data



LOGICAL EXCHANGE MODELS

- GRAPHICAL REPRESENTATIONS
 - Request models





STANDARD REQUEST FORMAT

- EXAMPLES FOR POSITION
 - Sample request and query strings provided in the Implementation Guide

Return vessel position summary messages based on a geospatial area and time window, to see last known positions of all vessels within that geospatial area.

/search/pos?ulat=\$value&ulng=\$value&llat=\$value&llng=\$value&start=\$value&end=\$value

Retrieve a full vessel position message from the URL in a position summary for full details on a specific vessel.

/retrieve/pos?entityid=\$eid&recordid=\$posid

Retrieve the most recent vessel position summary data for each vessel that has updated in the last 30 seconds in the geographic area of interest.

search/pos?ulat=\$value&ulng=\$value&llat=\$value&llng=\$value&start=\$value&end=\$value start, end should be the last 30 seconds



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Security & Data Management

Security attributes and record metadata are the elements used to provide access control for the data object. Security attributes are applied at the message, record and user level. For NIEM-Maritime, security attributes include Indicator, Releasable, Nation and Scope. Currently, Indicators are Law Enforcement (LEI), Protected (PPI) and the entire community (COI) with COI being all participants of the MISE.



AGENDA

- COMMON METADATA
- DATA SECURITY
- SAMPLE ISI SEQUENCE DIAGRAM
- THIRD PARTY SHARING



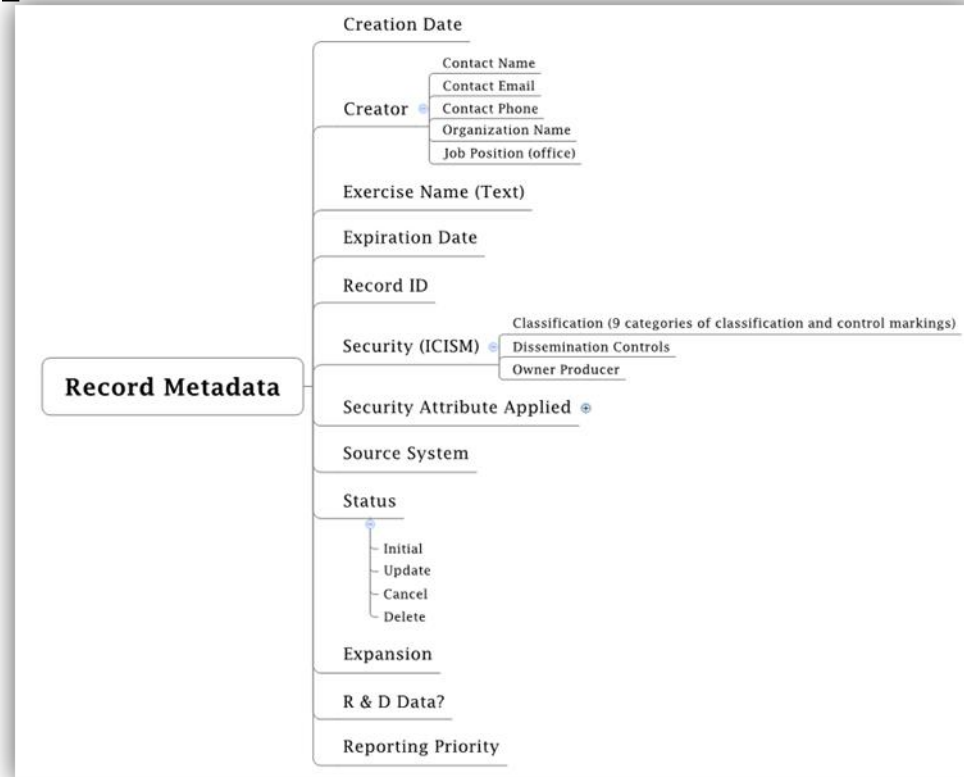
COMMON METADATA

- SUPPORTS CURRENT REQUIREMENTS

- Metadata and attributes support *current* community requirements

- MESSAGE & RECORD LEVEL

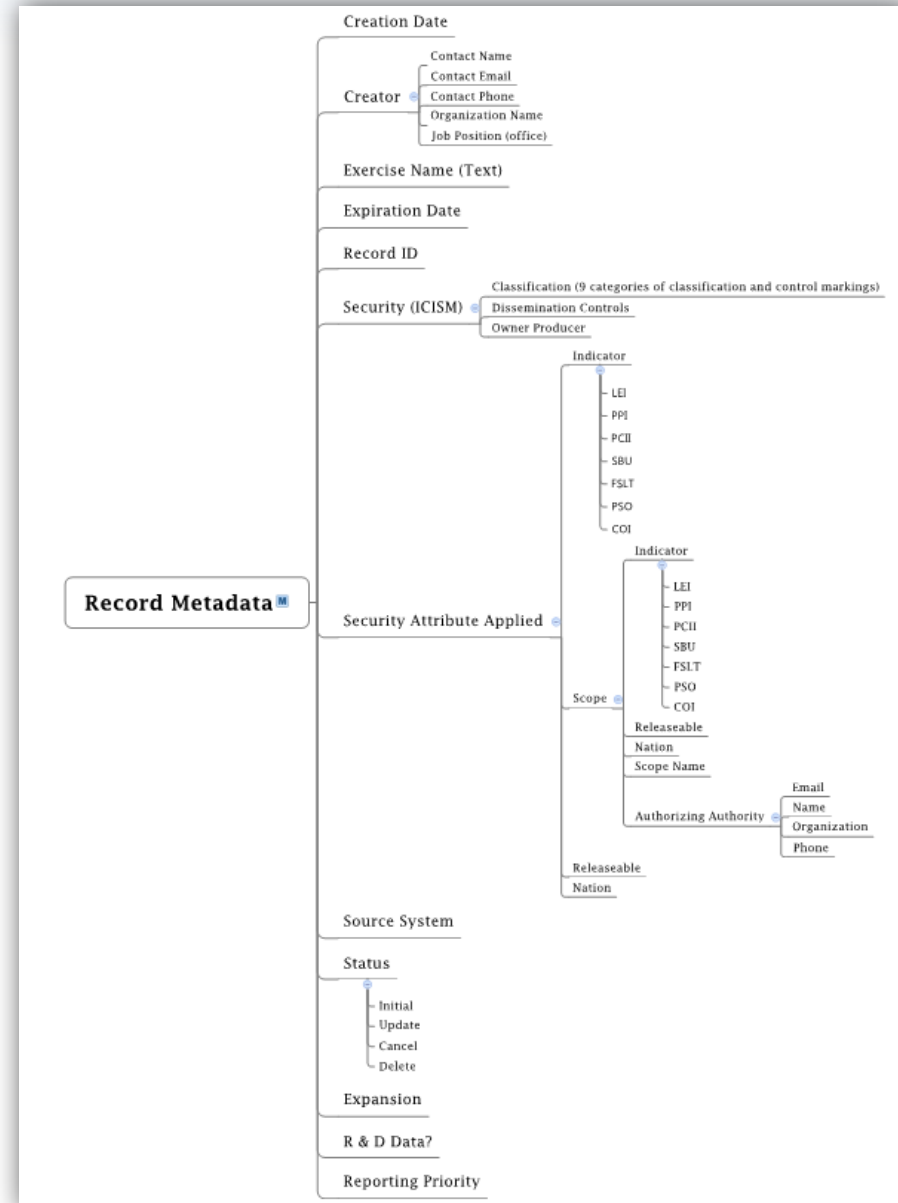
- Security
 - ICISM & Maritime
 - Aligns with DHS Stds
- Extensible
 - Can grow with community needs





DATA SECURITY

- COMMON SECURITY ATTRIBUTES
 - Indicator
 - Law Enforcement (LEI)
 - Privacy Protected (PPI)
 - Community of Interest (COI)
 - Releasability
 - Is the data publicly releasable (Y/N)
 - Nation
 - What nations can receive the data
 - Scope
 - Dynamic name to support emerging events or groups (Hurricane Sandy)
 - Definition includes Indicator, Releasability and Nation





DATA SECURITY

- METADATA SECURITY WITHIN AN XML MESSAGE

```
<message
```

```
  xmlns:posex="http://niem.gov/niem/domains/maritime/2.1/position/exchange/3.2"
```

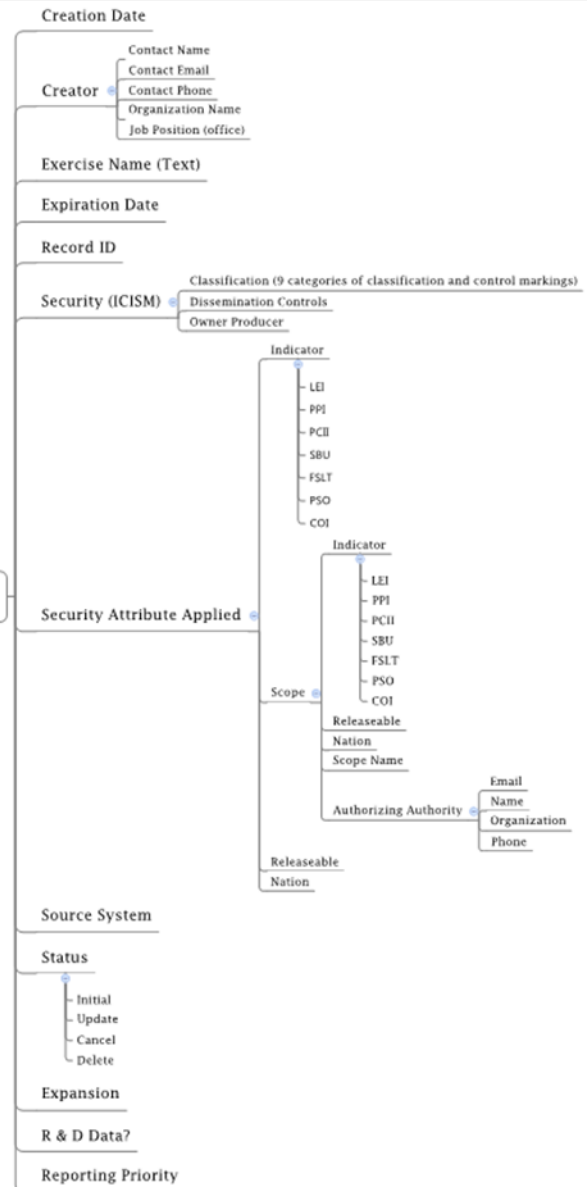
```
  mda:securityindicatorortext="LEI"
```

```
  mda:releasablenationscode="USA"
```

```
  mda:releasableindicator="false">
```

```
</message>
```

Record Metadata





PRESERVING ATTRIBUTES

- SECURITY ATTRIBUTES ARE MAINTAINED THROUGHOUT THE MISE SHARING PROCESS
- MAINTAINING SECURITY ATTRIBUTES
 - Attributes are associated to the messages and record
 - Publisher assigned attributes are passed to the data consumer system
 - Data consumer can apply the same sharing rules to ensure proper security controls for third party sharing



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Participation

The National MDA Architecture upholds that information sharing does not need to be impeded by technical, legal, and policy concerns. The Architecture has proven to be successful because organizations choose to participate in the MISE.



AGENDA

- PARTICIPATE IN THE MISE
- SHARING PROCESS – *YOUR* ROLE
- TRUSTED SYSTEM REQUIREMENTS



PARTICIPATE IN THE MISE

- **BECOME A TRUSTED SYSTEM**
 - Manage users, both anticipated and unanticipated
 - Already in most enterprise systems
 - Define system authorities (LE, PII, Country...)
 - Register system certificate with ISI
- **IDENTIFY DATA TO BE SHARED**
 - Map your existing database to an IEPD
 - Define access policies for the data types
- **IMPLEMENT SERVICE**
 - Industry standard web services
- **THIS CAN BE DONE IN DAYS, NOT YEARS**



SHARING PROCESS – YOUR ROLE

- **TRUSTED SYSTEMS**
 - Can serve as data providers, consumers or both.
- **USER ACCESS VIA TRUSTED SYSTEM**
 - Every user connects via a trusted system. That trusted system manages user access and attributes.
- **DATA MANAGEMENT VIA THE ISI**
 - Two ways to manage data
 - Information Broker : The ISI caches the information *and* acts as the decision authority
 - Request Broker : The ISI acts as a request broker, passing both the request and the user attributes from the information consumer system to the information provider system



TRUSTED SYSTEM REQUIREMENTS

- **TRUSTED SYSTEMS MUST:**
 - Have a user management system. The system must manage anticipated and unanticipated (registered and unregistered) users. The system must be able to provide attributes applicable to every user.
 - Provide for attribute management *if* third party sharing is available.
 - Implement restful web services that produce and consume NIEM compatible messages.
 - Demonstrate the need to have access the information contained in the MISE.
 - Get approval of the MISE Governance Board.



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Implementation

Successful implementation of the National MDA Architecture will result in a secure, collaborative, information-sharing environment with unprecedented access to decision quality information.



AGENDA

- DEMONSTRATED CAPABILITIES
- DCMP OV-1
- MISE IMPLEMENTATION GUIDE

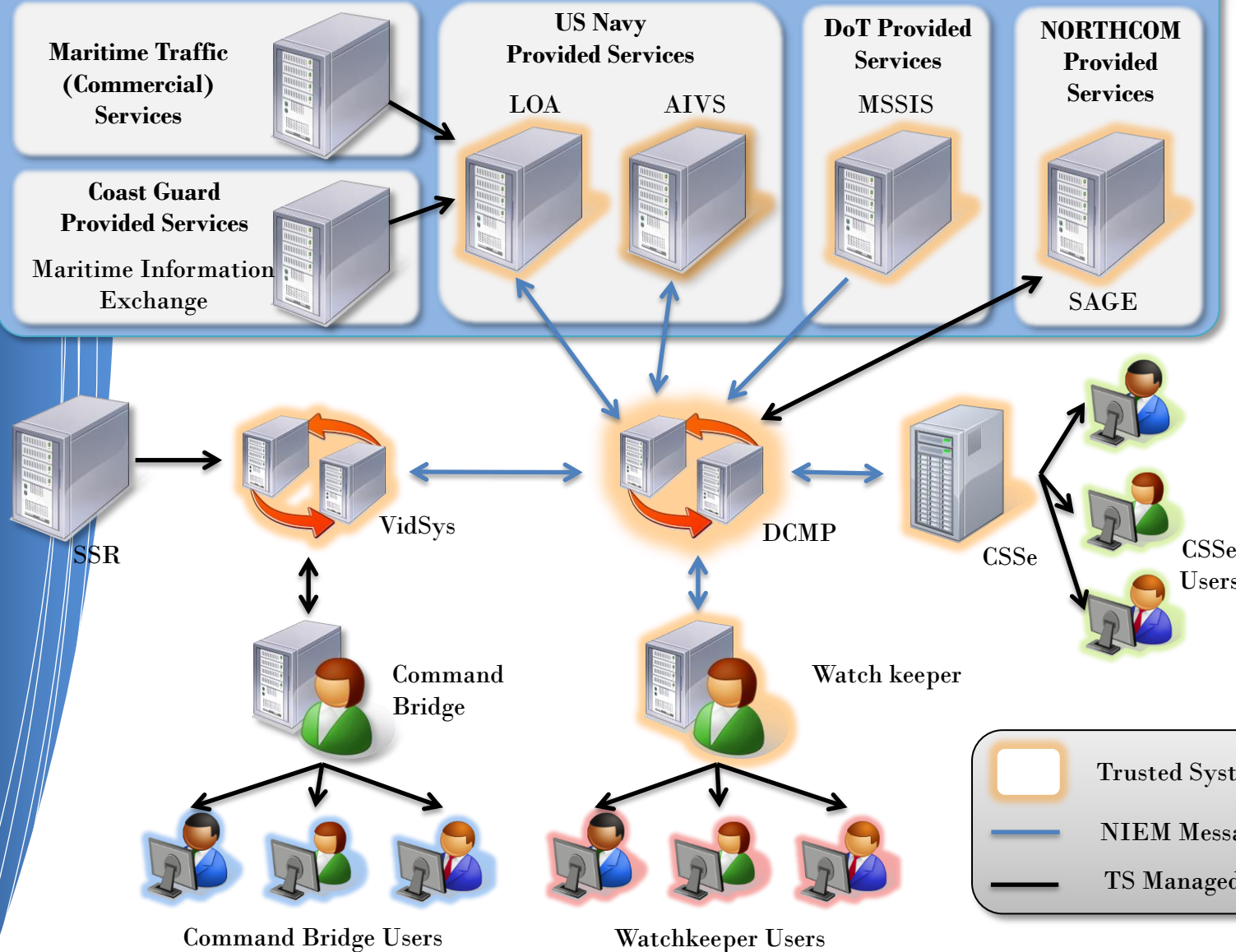


DEMONSTRATED CAPABILITIES

- TRIDENT WARRIOR 2011/2012, REGIONAL DOMAIN AWARENESS (RDA)
 - Successful sharing of real-time data
- AMAZON WEB SERVICES (AWS) COMMERCIAL IMPLEMENTATION
 - Pilot demonstration to evaluate technology
- DOMESTIC COMMON MARITIME PICTURE
 - DCMP is being implemented in the Ports of Baltimore

DCMP OV-1

Services From Other National MDA Architecture Participants





MISE IMPLEMENTATION GUIDE

- MISE.MDA.GOV
 - The Implementation Guide is available online

[Home](#) | [National MDA Architecture Plan](#) | [MISE Implementation](#) | [Maritime Exchanges](#) | [National MDA Documents](#)

[Home](#)

MISE Implementation

Getting Started with MISE

Implementation Guide

Walkthrough with code snippets demonstrating how to publish and consume data from the MISE.

[Learn More >>](#)

Specifications

HTTP-level request & response documentation for all functionality in the MISE services.

[Learn More >>](#)

Maritime IEPDs

The set of maritime exchanges defined using the National Information Exchange Model (NIEM) Maritime.

[Learn More >>](#)

Security

Details about the security implementation, trust fabric, authentication over SSL, and SAML.

[Learn More >>](#)

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MISE Implementation

The MISE implementation guide provides practitioners with all of the technical details, guidance and specific examples for interfacing with the Maritime Information Sharing Environment (MISE) defined by the National MDA Architecture.

- [Introduction](#)
- [Code Overview](#)
- [Process Flows for Security, Publish/Update, Delete, and Search/Retrieve](#)
- [NIEM-M Data Standards](#)
- [User Stories for Search](#)
- [Data Mapping](#)
- [Interfacing with the Security Services](#)
- [Interfacing with the Publication Service](#)
- [Interfacing with the Delete Service](#)
- [Interfacing with the Search and Retrieve Service](#)
- [Interfacing with Position-Specific Publish and Search](#)
- [Interfacing with the Retrieve Service \(Deprecated\)](#)
- [Testing on the Test Service Platform](#)
- [Going Live on the Integration Platform](#)
- [Specifications](#)
- [Test Plan and Criteria](#)

[Introduction >](#)



QUESTIONS

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